



Department of Environmental Quality Air Quality Division

Permit Application Form

Is this a revision to an existing application?

Yes _____

No ☒ X

Date of Application: 6/12/2015

Previous Application #:

COMPANY INFORMATION:

Company Name: SM Energy Co.
 Address: 550 North 31st Street Suite 500
 City: Billings State: Montana Zip Code: 59103
 Country: USA Phone Number: 4068698706

FACILITY INFORMATION:

Facility Name: Paint Fed 4075-18-19 1FH and Good Medicine Fed 4075-18-19-1SH
 New Facility or Existing Facility: New
 Facility Description: Oil and Gas Production Facility
 Facility Class: Minor Operating Status: Operating
 Facility Type: Production Site

For Oil & Gas Production Sites ONLY:

First Date of Production (FDOP)/Date of Modification: 5/6/15 and 4/24/15

Does production at this facility contain H2S?* No

**If yes, contact the Division.*

API Number(s): 49-009-29371 and 49-009-29370

NAICS Code: 211111 Crude Petroleum and Natural Gas Extraction

FACILITY LOCATION:**Enter the facility location in either the latitude/longitude area or section/township/range area. Both are not required.*

Physical Address:

City: Zip Code:
 State: WY County:

OR

Latitude: 43.44463 Longitude: -105.91353 County: Converse
 Quarter Quarter: NW Quarter: NW
 Section: 18 Township: 40N Range: 75W

*For longitude and latitude, use NAD 83/WGS84 datum and 5 digits after the decimal (i.e. 41.12345, -107.56789)***CONTACT INFORMATION:****Note that an Environmental AND NSR Permitting Contact is required for your application to be deemed complete by the agency.*

Title: Mr. First Name: Luke
 Last Name: Studer

Company Name: SM Energy Co
 Job Title: Sr. EHS Specialist

Address: 550 North 31st Street Suite 500
 City: Billings State: Montana
 Zip Code: 59103

Primary Phone No.: 406-869-8706 E-mail: lstuder@sm-energy.com
 Mobile Phone No.: Fax No.:
 Contact Type: Environmental contact Start Date:

Additional Contact Type (if needed):

Title: First Name:

Last Name:

Company Name:

Job Title:

Address:

City: State:

Zip Code:

Primary Phone No.: E-mail:

Mobile Phone No.: Fax No.:

Contact Type: Start Date:

FACILITY APPLICATION INFORMATION:**General Info:**

Has the facility changed location or is it a new/ greenfield facility?

Has a Land Use Planning document been included in this application?

Is the facility located in a sage grouse core area?

If the facility is in a sage grouse core area, what is the WER number?

** For questions about sage grouse core area, contact WY Game & Fish Department.*

Federal Rules Applicability - Facility Level:

Prevention of Significant Deterioration (PSD):

Non-Attainment New Source Review:

Modeling Section:

Has the Air Quality Division been contacted to determine if modeling is required?

Is a modeling analysis part of this application?

Is the proposed project subject to Prevention of Significant Deterioration (PSD) requirements?

Has the Air Quality Division been notified to schedule a pre-application meeting?

Has a modeling protocol been submitted to and approved by the Air Quality Division?

Has the Air Quality Division received a Q/D analysis to submit to the respective FLMS to determine the need for an AQRV analysis?

Required Attachments:

Facility Map ☒

Process Flow Diagram ☐

Modeling Analysis (if applicable) ☐

Land Use Planning Document ☐

Detailed Project Description ☒

Emissions Calculations ☒

I, Sr. EHS Specialist
Responsible Official (Printed Name) Title

an Official Representative of the Company, state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I further certify that the operational information provided and emission rates listed on this application reflect the anticipated emissions due to the operation of this facility. The facility will operate in compliance with all applicable Wyoming Air Quality Standards and Regulations.

Signature:
(ink)

Date:

SM ENERGY CO.

SITE SECURITY DIAGRAM:

WELL NO: GOOD MEDICINE FED 4075-18-19-1SH

PAINT FED 4075-18-19-1FH

STATE NO: ST 10-008485; ST 10-00455; WYW173999

FIELD NAME: FINLEY DRAW FIELD

LOCATION: G.M. FED-NWNW SEC 18-T40N-R75W

PAINT FED-NENW SEC 18-T40N-R75W

COUNTY: CONVERSE STATE: WY

SITE FACILITY PLAN LOCATED

AT:

SM ENERGY CO

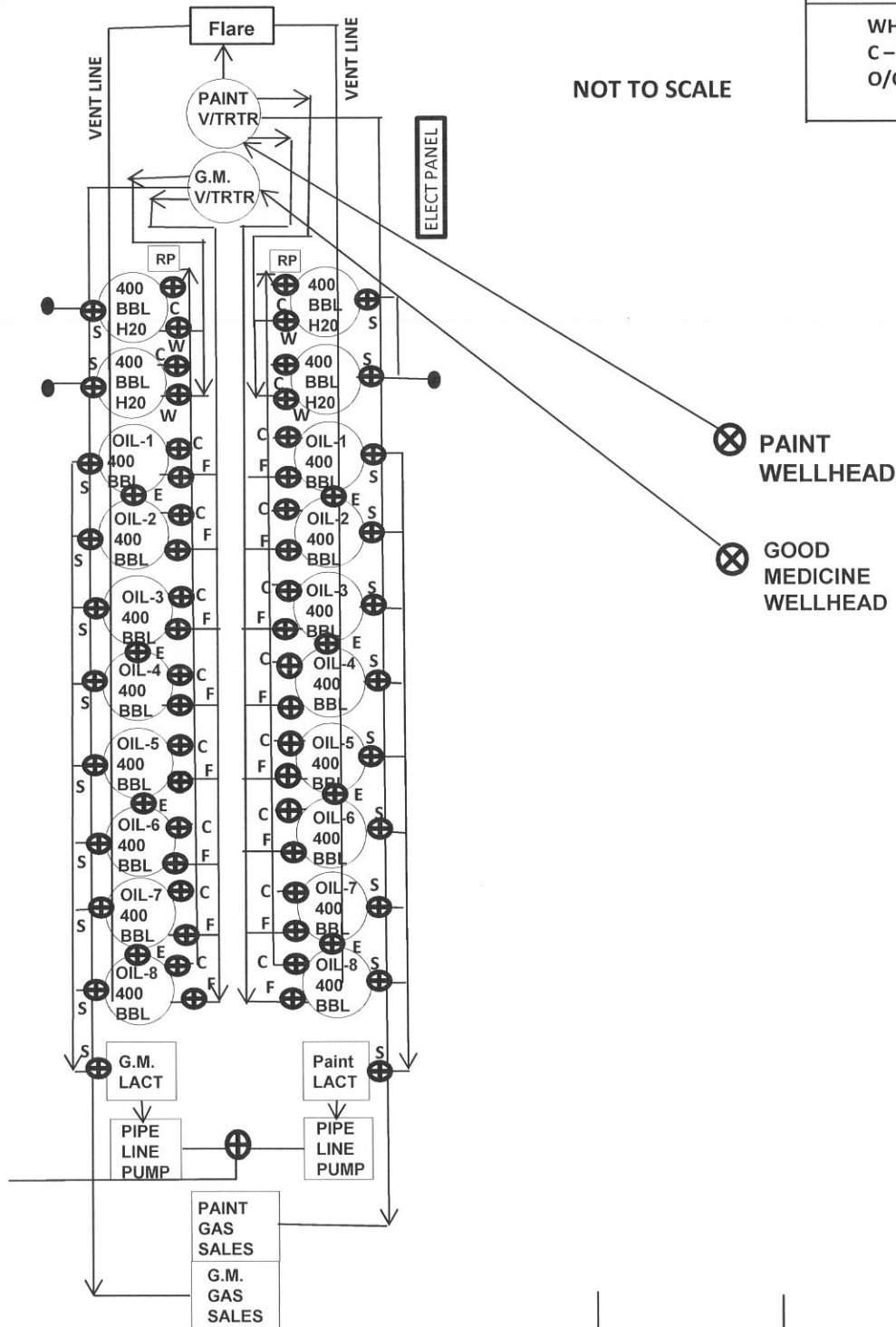
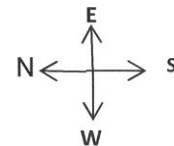
550 N 31ST ST, SUITE 500

BILLINGS, MT 59103

| VALVE SEALING DETAIL | PRODUCTION OR NORMAL OPERATIONS | RECYCLING | SALES |
|----------------------|---------------------------------|-----------|-------|
| C=RECYCLING | O/C | O | SC |
| E=EQUALIZER | O/C | O/C | SC |
| F=PRODUCTION | O | O/C | SC |
| I=INJECTION | SC | SC | O |

WHERE: O – OPEN, SO – SEALED OPEN, C – CLOSED, SC – SEALED CLOSED, O/C – OPEN OR SEALED

NOT TO SCALE



Entrance



STATE OF WYOMING
Department of Environmental Quality - Air Quality Division
Oil and Gas Production Facilities C6 S2 Permit Application



Equipment List

Company Name SM Energy
Facility Name Paint Fed 4075-18-19 1FH and Good Medicine Fed 4075-18-19-1SH

List all production equipment at the site including all pressurized vessels with the potential for flash emissions, all hydrocarbon liquids and produced water storage tanks, all dehydration units, all pneumatic pumps, all natural gas-fired burners and heaters and all emission control equipment and devices. Pressurized vessels with the potential for flash emissions are all vessels that vent vapors to the atmosphere during times other than upset or emergency conditions (water knockouts, 2-phase and 3-phase separators, heater treaters, gun barrels, scrubber pots, etc). Provide design ratings for dehys (MMCFD), process heaters, burners and pilots (MMBtu/hr, SCFH). Provide size of production & water storage tanks (BPD). For dehydration units indicate if the unit includes a glycol flash separator and/or reboiler still vent condenser. For emission control combustors/flares indicate design rating (MMBtu/hr, SCFD) and combustor/flare height (ft). Provide pneumatic pump motive gas usage (SCFH).

4 400-bbl water tank

16 400-bbl oil tanks (controlled by combustor)

2 6'x20' vertical treater with 0.75 MMBtu heater

2 small recycle pumps, less than 10 hp

2 Steffes combination flare with a low pressure tip for tank vapors and higher pressure for emergencies when produced gas cannot go to sales line

2 Natural gas-fired electrical generators (100 to 272 hp) - application submitted separately.

1 electric LACT unit not operated by SME

SM ENERGY GOOD MED/PAINT
FUGITIVE EMISSIONS

| Equipment Type | Component Source Counts | | | | Header |
|------------------|-------------------------|----------|-----------|----------------|--------|
| | Storage Tank | Wellhead | Separator | Heater-treater | |
| Number of units | 20 | 2 | 0 | 2 | 2 |
| Valves | 6 | 5 | 6 | 8 | 5 |
| Flanges | 4 | 10 | 12 | 12 | 10 |
| Connectors | 20 | 4 | 10 | 20 | 4 |
| Open-ended lines | 2 | 0 | 0 | 0 | 0 |
| Other components | 2 | 1 | 0 | 0 | 0 |

| Total Component Count | Emissions | | | TPY VOCs |
|-----------------------|--------------------------------------|--------|---------------------|----------|
| | Hydrocarbon EF (lb/component-day) | TPY HC | HC VOC Wt. Fraction | |
| Valves | 156 | 0.13 | 3.70 | 1 |
| Flanges | 144 | 0.0058 | 0.15 | 1 |
| Connectors | 456 | 0.011 | 0.92 | 1 |
| Open-ended lines | 40 | 0.074 | 0.54 | 1 |
| Other components | 42 | 0.4 | 3.07 | 1 |
| Total | 838 | | 8.38 | |

Total HCs = 8.38 TPY
 Total VOC's = 8.38 TPY
 Total VOC's = 1.91 lb/hr
 Total HAPs = 0.32 TPY
 Total HAPs = 0.07 lb/hr

- Component counts were derived from Table W-1C of Subpart W (Oil and Natural Gas Systems) of 40 CFR Part 98 for Western U.S. oil production equipment for wellheads and heater treater. Tank components are based on engineering estimates.
- Emission Factors (in lb/component-day) from Wyoming Air Quality Division Oil and Gas Permitting Guidance, 2007
- Light Oil VOC Weight fraction assumed to be 1.0 to be conservative
- To be conservative, all Speciated Fugitive Emission Factors (Wt Fractions) from light crude - Wyoming Air Quality Division Oil and Gas Permitting Guidance, 2007 (HAP Fraction of Hydrocarbon Emissions 0.2585)
- Total HAPs calculated by multiplying Total HCs in TPY by weight fraction HAPs

**SM ENERGY GOOD MED/PAINT
CONTROLLED TANK EMISSIONS**

| Paint Fed | | | | |
|---|-------------------------------|----------------------------------|-------------------------------|-------------------------------|
| CO and NOx Emissions From Combustion of Tank Vapors | | | | |
| Compound | Emission Factor (lb/MMBtu) | Throughput MMBtu/yr | Controlled Emissions (TPY) | Emission Factor Source |
| CO | 0.37 | 18,933 | 3.503 | AP-42 Table 13.5-1 |
| NO _x | 0.14 | 18,933 | 1.325 | AP-42 Table 13.5-1 |
| HC Vapor emissions (MSCFD) = 29.1800 Gas Heat Content (Btu/SCF) = 1,777.60 Annual heat throughput (Btu/yr) = 18,932,684,320 | | | | |
| VOC and HAPs Emissions From Combustion of Tank Vapors | | | | |
| Compound | Throughput (TPY) | Burner Control Efficiency (%) | Controlled Emissions (TPY) | Emission Factor Source |
| VOC | 240.70 | 98 | 4.814 | WY Oil and Gas Guidance -2010 |
| HAPs | 6.45 | 98 | 0.129 | WY Oil and Gas Guidance -2010 |
| Emissions are based on 98% control efficiency. Production values put in E&P Tanks is incorporating a decline factor of 40% to account for the decrease in production during the first year | | | | |
| Good Medicine | | | | |
| CO and NOx Emissions From Combustion of Tank Vapors | | | | |
| Compound | Emission Factor (lb/MMBtu) | Throughput MMBtu/yr | Controlled Emissions (TPY) | Emission Factor Source |
| CO | 0.37 | 14,849 | 2.747 | AP-42 Table 13.5-1 |
| NO _x | 0.14 | 14,849 | 1.039 | AP-42 Table 13.5-1 |
| HC Vapor emissions (MSCFD) = 16.4600 Gas Heat Content (Btu/SCF) = 2,471.66 Annual heat throughput (Btu/yr) = 14,849,486,114 | | | | |
| VOC and HAPs Emissions From Combustion of Tank Vapors | | | | |
| Compound | Throughput (TPY) | Burner Control Efficiency (%) | Controlled Emissions (TPY) | Emission Factor Source |
| VOC | 290.45 | 98 | 5.809 | WY Oil and Gas Guidance -2010 |
| HAPs | 5.78 | 98 | 0.116 | WY Oil and Gas Guidance -2010 |
| Emissions are based on 98% control efficiency. Production values put in E&P Tanks is incorporating a decline factor of 40% to account for the decrease in production during the first year | | | | |

* Project Setup Information *

Project File : \\tsclient\\M\\StoV\\SMEnergy-Air\\ProjectDocuments\\AirPermitCompliance\\Wyoming\\PowderRiverBasin\\Permits\\PaintGoodMedicine\\Backup\\Paint Fed.ept
Flowsheet Selection : Oil Tank with Separator
Calculation Method : RVP Distillation
Control Efficiency : 98.0%
Known Separator Stream : Low Pressure Oil
Entering Air Composition : No

Filed Name : SM Energy GoodMed Painter- Wibaux sample
Well Name : Combined
Date : 2015.06.08

* Data Input *

Separator Pressure : 74.00[psig]
Separator Temperature : 128.00[F]
Ambient Pressure : 12.50[psia]
Ambient Temperature : 60.00[F]
C10+ SG : 0.83253
C10+ MW : 174.58

-- Low Pressure Oil -----

| No. | Component | mol % |
|-----|---------------|---------|
| 1 | H2S | 0.0000 |
| 2 | O2 | 0.0000 |
| 3 | CO2 | 0.0547 |
| 4 | N2 | 0.0321 |
| 5 | C1 | 2.9888 |
| 6 | C2 | 1.4921 |
| 7 | C3 | 2.5865 |
| 8 | i-C4 | 0.6706 |
| 9 | n-C4 | 2.7010 |
| 10 | i-C5 | 1.7761 |
| 11 | n-C5 | 2.4760 |
| 12 | C6 | 2.3990 |
| 13 | C7 | 6.3990 |
| 14 | C8 | 7.7450 |
| 15 | C9 | 3.4791 |
| 16 | C10+ | 57.2278 |
| 17 | Benzene | 0.2263 |
| 18 | Toluene | 1.9541 |
| 19 | E-Benzene | 1.0125 |
| 20 | Xylenes | 1.5235 |
| 21 | n-C6 | 2.2034 |
| 22 | 224Trimethylp | 1.0613 |

-- Sales Oil -----

Production Rate : 647[bb]/day
Days of Annual Operation : 365 [days/year]
API Gravity : 41.4
Reid Vapor Pressure : 9.20[psia]

* Calculation Results *

-- Emission Summary -----

| Item | Uncontrolled [ton/yr] | Uncontrolled [lb/hr] | Controlled [ton/yr] | Controlled [lb/hr] |
|-------------|--------------------------|-------------------------|------------------------|-----------------------|
| Total HAPs | 6.450 | 1.473 | 0.129 | 0.029 |
| Page 1----- | | | | E&P TANK |
| Total HC | 427.033 | 97.496 | 8.541 | 1.950 |
| VOCs, C2+ | 317.860 | 72.571 | 6.357 | 1.451 |
| VOCs, C3+ | 240.691 | 54.952 | 4.814 | 1.099 |

Uncontrolled Recovery Info.

Vapor 29.1800 [MSCFD]
HC Vapor 28.8000 [MSCFD]
GOR 45.10 [SCF/bbl]

-- Emission Composition -----

| No | Component | Uncontrolled | | Controlled | |
|----|---------------|--------------|---------|------------|---------|
| | | [ton/yr] | [lb/hr] | [ton/yr] | [lb/hr] |
| 1 | H2S | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | O2 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3 | CO2 | 4.750 | 1.084 | 4.750 | 1.084 |
| 4 | N2 | 2.147 | 0.490 | 2.147 | 0.490 |
| 5 | C1 | 109.173 | 24.925 | 2.183 | 0.499 |
| 6 | C2 | 77.169 | 17.618 | 1.543 | 0.352 |
| 7 | C3 | 110.692 | 25.272 | 2.214 | 0.505 |
| 8 | i-C4 | 18.844 | 4.302 | 0.377 | 0.086 |
| 9 | n-C4 | 54.711 | 12.491 | 1.094 | 0.250 |
| 10 | i-C5 | 17.840 | 4.073 | 0.357 | 0.081 |
| 11 | n-C5 | 18.086 | 4.129 | 0.362 | 0.083 |
| 12 | C6 | 5.661 | 1.292 | 0.113 | 0.026 |
| 13 | C7 | 5.562 | 1.270 | 0.111 | 0.025 |
| 14 | C8 | 2.321 | 0.530 | 0.046 | 0.011 |
| 15 | C9 | 0.380 | 0.087 | 0.008 | 0.002 |
| 16 | C10+ | 0.145 | 0.033 | 0.003 | 0.001 |
| 17 | Benzene | 0.304 | 0.069 | 0.006 | 0.001 |
| 18 | Toluene | 0.817 | 0.187 | 0.016 | 0.004 |
| 19 | E-Benzene | 0.153 | 0.035 | 0.003 | 0.001 |
| 20 | Xylenes | 0.198 | 0.045 | 0.004 | 0.001 |
| 21 | n-C6 | 4.080 | 0.932 | 0.082 | 0.019 |
| 22 | 224Trimethylp | 0.896 | 0.205 | 0.018 | 0.004 |
| | Total | 433.929 | 99.071 | 8.679 | 1.981 |

-- Stream Data -----

| No. | Component | MW | LP Oil | Flash Oil | Sale Oil | Flash Gas | W&S Gas | Total Emissions |
|-----|---------------|--------|---------|-----------|----------|-----------|---------|-----------------|
| | | mol % | mol % | mol % | mol % | mol % | mol % | |
| 1 | H2S | 34.80 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2 | O2 | 32.00 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3 | CO2 | 44.01 | 0.0547 | 0.0109 | 0.0109 | 0.7682 | 0.0000 | 0.7682 |
| 4 | N2 | 28.01 | 0.0321 | 0.0006 | 0.0006 | 0.5454 | 0.0000 | 0.5454 |
| 5 | C1 | 16.04 | 2.9888 | 0.1987 | 0.1987 | 48.4332 | 0.0000 | 48.4332 |
| 6 | C2 | 30.07 | 1.4921 | 0.4623 | 0.4623 | 18.2651 | 0.0000 | 18.2651 |
| 7 | C3 | 44.10 | 2.5865 | 1.6483 | 1.6483 | 17.8658 | 0.0000 | 17.8658 |
| 8 | i-C4 | 58.12 | 0.6706 | 0.5701 | 0.5701 | 2.3074 | 0.0000 | 2.3074 |
| 9 | n-C4 | 58.12 | 2.7010 | 2.4553 | 2.4553 | 6.6993 | 0.0000 | 6.6993 |
| 10 | i-C5 | 72.15 | 1.7761 | 1.7769 | 1.7769 | 1.7598 | 0.0000 | 1.7598 |
| 11 | n-C5 | 72.15 | 2.4760 | 2.5182 | 2.5182 | 1.7841 | 0.0000 | 1.7841 |
| 12 | C6 | 86.16 | 2.3990 | 2.5166 | 2.5166 | 0.4797 | 0.0000 | 0.4797 |
| 13 | C7 | 100.20 | 6.3990 | 6.7662 | 6.7662 | 0.4081 | 0.0000 | 0.4081 |
| 14 | C8 | 114.23 | 7.7450 | 8.2106 | 8.2106 | 0.1488 | 0.0000 | 0.1488 |
| 15 | C9 | 128.28 | 3.4791 | 3.6910 | 3.6910 | 0.0220 | 0.0000 | 0.0220 |
| 16 | C10+ | 174.58 | 57.2278 | 60.7352 | 60.7352 | 0.0059 | 0.0000 | 0.0059 |
| 17 | Benzene | 78.11 | 0.2263 | 0.2385 | 0.2385 | 0.0277 | 0.0000 | 0.0277 |
| 18 | Toluene | 92.13 | 1.9541 | 2.0700 | 2.0700 | 0.0631 | 0.0000 | 0.0631 |
| 19 | E-Benzene | 106.17 | 1.0125 | 1.0739 | 1.0739 | 0.0102 | 0.0000 | 0.0102 |
| 20 | Xylenes | 106.17 | 1.5235 | 1.6161 | 1.6161 | 0.0133 | 0.0000 | 0.0133 |
| 21 | n-C6 | 86.18 | 2.2034 | 2.3178 | 2.3178 | 0.3370 | 0.0000 | 0.3370 |
| 22 | 224Trimethylp | 114.24 | 1.0613 | 1.1229 | 1.1229 | 0.0558 | 0.0000 | 0.0558 |

MW 136.15 142.61 142.61 30.88 0.00 30.88
Stream Mole Ratio 1.0000 0.9422 0.9422 0.0578 0.0000 0.0578
Heating Value [BTU/SCF] 1777.59 0.00 1777.59
Gas Gravity [Gas/Air] 1.07 0.00 1.07
Bubble Pt. @ 100F [psia] 133.84 18.03 18.03
RVP @ 100F [psia] 27.46 8.50 8.50

Page 2----- E&P TANK

Spec. Gravity @ 100F 0.776 0.783 0.783

NSR Application A0001212
Paint Fed 4075-18-19 & Good Medicine Fed 4075-18-19-1SH
F026690
July 07, 2015

If I am claiming any information in this submission is a trade secret, I hereby swear or affirm that the trade secret request meets the requirements of Wyoming Air Quality Standards and Regulations and that the justification submitted with the trade secret request sets forth the basis for claiming that the information should be considered a trade secret as defined in Wyoming Air Quality Standards and Regulations.

- a) I am the Authorized Representative identified in applicable Wyoming Air Quality Standards and Regulations as authorized to sign this document; and
- b) Based on information and belief formed after reasonable inquiry, I hereby affirm that all factual statements in this transmittal are true, accurate and complete to the best of my knowledge and that all judgments and estimates have been made in good faith.

Account: rcedel

Date/time submitted: Jul 7 2015, 10:19:38

Air Quality Division
Application for NSR Permit

Jul 7 2015, 10:19:38

- **NSR Application**

This information should be filled out for each New Source Review (NSR) application. An NSR permit is required for all air contaminant sources (emissions units) installed or modified after January 1, 1974. See the application instructions for additional information.

- **Purpose of Application**

Please summarize the reason this permit is being applied for.

The Paint Fed and Good Medicine Fed are a new oil and gas production facility located in Converse County, Wyoming. To comply with permitting requirements, SM Energy respectfully submits this application. Please contact us with any questions. Thank you.

Has the facility changed location or is it a new/greenfield facility? Yes

Has a Land Use Planning document been included in this application? No

Does production at this facility contain H2S? No

- **Federal Rules Applicability - Facility Level**

Prevention of Significant Deterioration (PSD)

These rules are found under WAQSR Chapter 6, Section 4.

Not affected

Non-Attainment New Source Review

These rules are found under WAQSR Chapter 6, Section 13.

Not affected

- **Trade Secret Information** - One or more Emissions Units in this application contains trade secret information.

No

- **Permit Application Contact** - Newly created contacts and application contact changes will be saved when the application is saved.

| | | |
|----------------|-----------------------|-----------------------|
| Luke Studer | Senior EHS Specialist | SM Energy Company |
| Name | Title | Company |
| PO Box 7168 | Billings, MT | 59103 |
| Street Address | City/Township, State | Zip Code |
| (406) 869-8706 | | lstuder@sm-energy.com |
| Phone | Fax | E-mail |

- **Modeling Section**

Ambient Air Quality Impact Analysis: WAQSR Chapter 6, Section 2(c)(ii) requires that permit applicants demonstrate that a proposed facility will not prevent the attainment or maintenance of any ambient air quality standard.

Has the applicant contacted AQD to determine if modeling is required? No

Is a modeling analysis part of this application? No

Is the proposed project subject to Prevention of Significant Deterioration (PSD) requirements? No

- **Application Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|------------------------|--------------------------|
| X | 6197 | Process Flow Diagram | Process Diagram |
| X | 6198 | Emissions Calculations | Emissions Calculations |
| X | 6199 | Cover Letter/Project | Cover Letter and Project |

| | | | |
|---|------|----------------|------------------|
| | | Description | Description |
| x | 6200 | Equipment List | Equipment List |
| x | 6201 | Facility Map | Facility Diagram |

Section II - Specific Air Contaminant Source Information

AQD EU ID: ENG002

AQD EU description: one (1) natural
gas fired
generator no
larger than 272
hp.

Company EU ID: NG Engines

Company EU Description: one (1) natural
gas fired
generator no
larger than 272
hp.

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

04/24/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,300.00

Fuel Sulfur Content : 0.00

Type of Service : Generator

Units : Btu/scf

Units : ppm

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre- Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determinatio n* |
|-----------------------|---|-----------------------------|--------|---|--|---------------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions | 0 | 0 | | 0 | 0 | |

| | | | | | | |
|---|---|-----|----------|-------|-------|-------------------|
| (PE/PM) (formerly particulate matter, PM) | | | | | | |
| PM # 10 microns in diameter (PE/PM10) | 0 | 0 | | 0 | 0 | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | | 0 | 0 | |
| Nitrogen oxides (NOx) | 0 | 0.7 | gr/hp-hr | 0.254 | 1.114 | Manufacturer Data |
| Carbon monoxide (CO) | 0 | 0.5 | gr/hp-hr | 0.182 | 0.796 | Manufacturer Data |
| Volatile organic compounds (VOC) | 0 | 0.5 | gr/hp-hr | 0.182 | 0.796 | Manufacturer Data |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 | | 0 | 0 | |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H2S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)
New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Subject to subpart

| NSPS Subpart |
|---|
| JJJJ - Stationary Spark Ignition Internal Combustion Engine |

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)

Not affected

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)

Subject to subpart

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

| Part 63 NESHAP Subpart |
|--|
| ZZZZ - Reciprocating Internal Combustion Engines |

Prevention of Significant Deterioration (PSD)

Not Affected

These rules are found under WAQSR Chapter 6, Section 4.

Non-Attainment New Source Review

Not Affected

These rules are found under WAQSR Chapter 6, Section 13.

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

Section II - Specific Air Contaminant Source Information

AQD EU ID: HET001

AQD EU description:**Company EU ID:** Paint HTH**Company EU Description:** Paint Fed Heater
treater heater

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

05/06/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : ppm

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre- Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determinatio n* |
|--|---|-----------------------------|--------|---|--|---------------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0 | 0 | | 0 | 0 | |
| PM # 10 microns in diameter (PE/PM10) | 0 | 0 | | 0 | 0 | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | | 0 | 0 | |

| | | | | | | |
|---------------------------------------|---|------|----------|-------|-------|-------|
| Nitrogen oxides (NOx) | 0 | 0.1 | lb/MMBtu | 0.074 | 0.322 | AP-42 |
| Carbon monoxide (CO) | 0 | 0.07 | lb/MMBtu | 0.062 | 0.271 | AP-42 |
| Volatile organic compounds (VOC) | 0 | 0.01 | lb/MMBtu | 0.004 | 0.018 | AP-42 |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 | | 0.001 | 0.006 | AP-42 |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H ₂ S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

Prevention of Significant Deterioration (PSD)

These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

Non-Attainment New Source Review

These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

Section II - Specific Air Contaminant Source Information

AQD EU ID: HET002

AQD EU description:

Company EU ID: GM HTH

Company EU Description: Good Med Heater
Treater Heater

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

04/24/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : ppm

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|----------|-----------------------------------|------------------------------------|--------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0 | 0 | | 0 | 0 | |
| PM # 10 microns in diameter (PE/PM10) | 0 | 0 | | 0 | 0 | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | lb/MMBtu | 0 | 0.002 | AP-42 |

| | | | | | | |
|---------------------------------------|---|------|----------|-------|-------|-------|
| Nitrogen oxides (NOx) | 0 | 0.1 | lb/MMBtu | 0.074 | 0.322 | AP-42 |
| Carbon monoxide (CO) | 0 | 0.08 | lb/MMBtu | 0.062 | 0.271 | AP-42 |
| Volatile organic compounds (VOC) | 0 | 0.01 | lb/MMBtu | 0.004 | 0.018 | AP-42 |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 | | 0.001 | 0.006 | AP-42 |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H ₂ S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)

Not affected

National Emission Standards for Hazardous Air Pollutants
(NESHAP Part 63) standards are listed under 40 CFR 63.

Prevention of Significant Deterioration (PSD)

Not Affected

These rules are found under WAQSR Chapter 6, Section 4.

Non-Attainment New Source Review

Not Affected

These rules are found under WAQSR Chapter 6, Section 13.

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

Section II - Specific Air Contaminant Source Information

AQD EU ID: TNK001

AQD EU description:

Company EU ID: Paint Oil

Company EU Description: Paint Fed Oil
Tanks Crude 1-8

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

05/06/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Storage Tank/Silo

Maximum Hourly Throughput 54.0000

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 14.00

Vapor Pressure of Material 9.00
Stored (psig) :

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre- Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determinatio n* |
|--|---|-----------------------------|--------|---|--|---------------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0 | 0 | | 0 | 0 | |
| PM # 10 microns in | 0 | 0 | | 0 | 0 | |

| | | | | | | |
|---|-------|------|----------|------|------|-------|
| diameter (PE/PM10) | | | | | | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | | 0 | 0 | |
| Nitrogen oxides (NOx) | 0 | 0.14 | lb/MMBtu | 0.3 | 1.33 | AP-42 |
| Carbon monoxide (CO) | 0 | 0.37 | lb/MMBtu | 0.8 | 3.5 | AP-42 |
| Volatile organic compounds (VOC) | 240.7 | 0 | | 1.1 | 4.81 | Other |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 6.45 | 0 | | 0.03 | 0.13 | Other |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H2S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These

Not affected

include asbestos, benzene, beryllium, mercury, and vinyl chloride).

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

Not affected

Prevention of Significant Deterioration (PSD)

These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

Non-Attainment New Source Review

These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

Section II - Specific Air Contaminant Source Information

AQD EU ID: TNK002

AQD EU description:

Company EU ID: GM Oil Tk

Company EU Description: Good Med Fed Crude
oil Tanks 1-8

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

04/24/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Storage Tank/Silo

Maximum Hourly Throughput 10.0000
:

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 14.00

Vapor Pressure of Material 9.00
Stored (psig) :

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre- Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determinatio n* |
|--|---|-----------------------------|--------|---|--|---------------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0 | 0 | | 0 | 0 | |
| PM # 10 microns in | 0 | 0 | | 0 | 0 | |

| | | | | | | |
|---|--------|------|----------|------|------|-------|
| diameter (PE/PM10) | | | | | | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | | 0 | 0 | |
| Nitrogen oxides (NOx) | 0 | 0.14 | lb/MMBtu | 0.24 | 1.04 | AP-42 |
| Carbon monoxide (CO) | 0 | 0.37 | lb/MMBtu | 0.63 | 2.75 | AP-42 |
| Volatile organic compounds (VOC) | 290.45 | 0 | | 1.33 | 5.81 | Other |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 5.78 | 0 | | 0.03 | 0.12 | Other |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H2S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These

Not affected

include asbestos, benzene, beryllium, mercury, and vinyl chloride).

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

Prevention of Significant Deterioration (PSD)

Not Affected

These rules are found under WAQSR Chapter 6, Section 4.

Non-Attainment New Source Review

Not Affected

These rules are found under WAQSR Chapter 6, Section 13.

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

Section II - Specific Air Contaminant Source Information

AQD EU ID: TNK003

AQD EU description:

Company EU ID: PGM W Tk

Company EU Description: Pain/Good Med
Produced Water
Tanks 1-4

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

Date production began:

04/24/2015

- **Emission Unit Type Specific Information**

Emission Unit Type: Storage Tank/Silo

Maximum Hourly Throughput 114.2000

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 14.00

Vapor Pressure of Material 1.00
Stored (psig) :

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

Criteria Pollutants :

| Pollutant | Pre- Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determinatio n* |
|--|---|-----------------------------|--------|---|--|---------------------------------|
| | | Potential to Emit (PTE)* | Units* | | | |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0 | 0 | | 0 | 0 | |
| | | | | | | |

| | | | | | | |
|---|---|---|--|---|---|--|
| PM # 10 microns in diameter (PE/PM10) | 0 | 0 | | 0 | 0 | |
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 | | 0 | 0 | |
| Sulfur dioxide (SO2) | 0 | 0 | | 0 | 0 | |
| Nitrogen oxides (NOx) | 0 | 0 | | 0 | 0 | |
| Carbon monoxide (CO) | 0 | 0 | | 0 | 0 | |
| Volatile organic compounds (VOC) | 0 | 0 | | 0 | 0 | |
| Lead (Pb) | 0 | 0 | | 0 | 0 | |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 | | 0 | 0 | |
| Fluoride (F) | 0 | 0 | | 0 | 0 | |
| Hydrogen Sulfide (H2S) | 0 | 0 | | 0 | 0 | |
| Mercury (Hg) | 0 | 0 | | 0 | 0 | |
| Total Reduced Sulfur (TRS) | 0 | 0 | | 0 | 0 | |
| Sulfuric Acid Mist (SAM) | 0 | 0 | | 0 | 0 | |

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

Greenhouse Gases (GHGs):

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards | | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
| | | | Potential to Emit (PTE)* | Units* | | | |

* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

** AQD Calculated - See 'Help' for more information.

- Best Available Control Technology (BACT)

Was a BACT Analysis completed for this unit? No

- Lowest Achievable Emission Rate (LAER)

Was a LAER Analysis completed for this unit? No

- Federal and State Rule Applicability

New Source Performance Standards (NSPS)
New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)
National Emissions Standards for Hazardous Air Pollutants

Not affected

(NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)
National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

Not affected

Prevention of Significant Deterioration (PSD)
These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

Non-Attainment New Source Review
These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

ID: F026690

- **Facility Information**

Facility ID: F026690

FacilityName: Paint Fed 4075-18-19 & Good Medicine Fed 4075-18-19-1SH

Facility Description:

Company Name: SM Energy Company

Operating Status: Operating

Facility Class: Minor

CERR Class: NON

AFS:

Facility Type: Production Site

- **Location**

| Physical Address | City | County | Lat/Long | PLSS | Effective Date |
|-------------------------|--------------------|----------|-------------------------|-------------------------|----------------|
| Section 18, 40N, 75W | Converse County | Converse | 43.44463/- 105.91353 | QNWNW-S18- T40N-R75W | 02/18/2015 |

Location Detail For : Section 18, 40N, 75W

Latitude: 43.44463

Longitude: -105.91353

Quarter Quarter: NW

Quarter: NW

Section: 18

Township: 40N

Range: 75W

County: Converse

State: Wyoming

Distict: District 2

Physical Address 1: Section 18, 40N, 75W

Physical Address 2:

City: Converse County

Zip: 82633

Effective Date: 02/18/2015

- **API**

| |
|---------|
| API |
| 0929370 |
| 0929371 |

- **Notes**

| User Name | Date | Note |
|-----------|------|------|
|-----------|------|------|

- **NAICS Codes**

211111 Crude Petroleum and Natural Gas Extraction (SIC 1311)

- **Contacts**

| Contact Type | Contact Person | Phone Number | Email | Start Date | End Date |
|------------------------|----------------|----------------|-----------------------|------------|----------|
| Environmental contact | Studer, Luke | (406) 869-8706 | lstuder@sm-energy.com | 02/18/2015 | |
| NSR Permitting contact | Studer, Luke | (406) 869-8706 | lstuder@sm-energy.com | 02/18/2015 | |

Contact Detail For : Studer, Luke

Prefix:

First Name: Luke

Middle Name:

Last Name: Studer

Suffix:

Company Title: Senior EHS Specialist

Contact's Company Name: SM Energy Company

Address 1: PO Box 7168

Address 2:

City: Billings

Zip Code: 59103-7168

State: Montana

Work Phone No: (406) 869-8706

Secondary Phone No.:

Address 2:

Secondary Ext. No.:

Mobile Phone No.:

Pager No.:

Fax No:

Pager PIN No.:

Email: lstuder@sm-energy.com

Email Pager Address:

- Rules & Regs

Subject to Part 60 NSPS: X

Subject to 112(r) Accidental Release
Prevention:

Subject to Part 61 NESHAP:

Subject to non-attainment NSR:

Subject Part 63 NESHAP: X

Subject to PSD:

Subject to Title IV Acid Rain:

Part 60 NSPS Subparts

JJJJ - Stationary Spark Ignition Internal Combustion Engine

Part 63 NESHAP Subparts

ZZZZ - Reciprocating Internal Combustion Engines

- Attachments

| Description | Type | Modified By | Modified Date |
|-------------|------|-------------|---------------|
|-------------|------|-------------|---------------|

- Version

| Version ID | Version Start Date | Version End Date | Preserved |
|------------|--------------------|------------------|-----------|
| CURRENT | 09/11/2015 | | |
| 31084 | 07/07/2015 | 09/11/2015 | X |
| 30792 | 06/18/2015 | 07/07/2015 | X |
| 29893 | 04/03/2015 | 06/18/2015 | X |
| 29173 | 02/18/2015 | 04/03/2015 | X |

Emission Unit : ENG001

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: ENG001

Emission Unit Type: Engine

Name Plate Rating: 272.00

Units: hp

Site Rating: 272.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: N/A

Model Name and Number: NG Engines

Engine: 4 Stroke Rich Burn

AQD Description: one (1) natural gas fired generator no larger than 272 hp.

Company Equipment ID: NG Engines

Company Equipment Description: one (1) natural gas fired generator no larger than 272 hp.

Operating Status: Not Yet Installed

Initial Construction Commencement
Date:

Initial Operation Commencement
Date:

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Serial Number Tracking

| Serial Number | Manufacturer Name | Construction/Installation Commencement Date | Operation Commencement/Start-up Date | Order Date | Manufacture Date | Shutdown Date | Removal Date |
|---------------|-------------------|---|--------------------------------------|------------|------------------|---------------|--------------|
| TBD | NG Engines | | | | | | |

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
| | | | | | |

- Processes

- Emission Process Information

Process ID: PRC001

Process Name:

Company Process Description:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC001

Emission Unit : ENG002

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: ENG002

Emission Unit Type: Engine

Name Plate Rating: 272.00

Units: hp

Site Rating: 272.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: N/A

Model Name and Number: NG Engines

Engine: 4 Stroke Rich Burn

AQD Description: one (1) natural gas fired generator no larger than 272 hp.

Company Equipment ID: NG Engines

Company Equipment Description: one (1) natural gas fired generator no larger than 272 hp.

Operating Status: Not Yet Installed

Initial Construction Commencement
Date:

Initial Operation Commencement
Date:

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Serial Number Tracking

| Serial Number | Manufacturer Name | Construction/Installation Commencement Date | Operation Commencement/Start-up Date | Order Date | Manufacture Date | Shutdown Date | Removal Date |
|---------------|-------------------|---|--------------------------------------|------------|------------------|---------------|--------------|
| TBD | NG Engines | | | | | | |

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
| | | | | | |

- Processes

- Emission Process Information

Process ID: PRC002

Process Name:

Company Process Description:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC002

Emission Unit : HET001

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: HET001

Emission Unit Type: Heater/Chiller

Firing Type: Direct

Heat Input Rating: 0.75

Units: MMBtu/hr

Primary Fuel Type: Field Gas

Secondary Fuel Type: N/A

Heat Content of Fuel (BTU/scf): 1335

AQD Description:

Company Equipment ID: Paint HTH

Company Equipment Description: Paint Fed Heater treater heater

Operating Status: Operating

Initial Construction Commencement Date: 03/02/2015

Initial Operation Commencement Date: 04/24/2015

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC003

Process Name:

Company Process Description:

Source Classification Code (SCC): 3-10-001-29

Emission Unit : HET002

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: HET002

Emission Unit Type: Heater/Chiller

Firing Type: Direct

Heat Input Rating: 0.75

Units: MMBtu/hr

Primary Fuel Type: Field Gas

Secondary Fuel Type: N/A

Heat Content of Fuel (BTU/scf): 1335

AQD Description:

Company Equipment ID: GM HTH

Company Equipment Description: Good Med Heater Treater Heater

Operating Status: Operating

Initial Construction Commencement Date: 03/02/2015

Initial Operation Commencement Date: 05/06/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC004

Process Name:

Company Process Description:

Source Classification Code (SCC): 3-10-001-29

Emission Unit : TNK001

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: TNK001

Emission Unit Type: Storage Tank/Silo

Material Type: Liquid

Description of Material Stored: Crude oil from oil well production

Capacity: 400

Units: barrels

Maximum Throughput: 647.1000

Units: barrels/day

AQD Description:

Company Equipment ID: Paint Oil

Company Equipment Description: Paint Fed Oil Tanks Crude 1-8

Operating Status: Operating

Initial Construction Commencement 03/02/2015
Date:

Initial Operation Commencement 04/24/2015
Date:

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC006

Process Name:

Company Process Description:

Source Classification Code (SCC): 4-04-003-12

Emission Unit : TNK002

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: TNK002

Emission Unit Type: Storage Tank/Silo

Material Type: Liquid

Description of Material Stored: Crude oil from oil well production

Capacity: 400

Units: barrels

Maximum Throughput: 111.0000

Units: barrels/day

AQD Description:

Company Equipment ID: GM Oil Tk

Company Equipment Description: Good Med Fed Crude oil Tanks 1-8

Operating Status: Operating

Initial Construction Commencement Date: 03/02/2015

Initial Operation Commencement Date: 05/06/2015

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC005

Process Name:

Company Process Description:

Source Classification Code (SCC): 4-04-003-12

Emission Unit : TNK003

Sep 18 2015, 09:17:14

- Emission Unit Information

AQD Emissions Unit ID: TNK003

Emission Unit Type: Storage Tank/Silo

Material Type: Liquid

Description of Material Stored: Produced water from oil well production

Capacity: 400

Units: barrels

Maximum Throughput: 1370.0000

Units: barrels/day

AQD Description:

Company Equipment ID: PGM W Tk

Company Equipment Description: Pain/Good Med Produced Water Tanks 1-4

Operating Status: Operating

Initial Construction Commencement Date: 03/02/2015

Initial Operation Commencement Date: 04/24/2015

Most Recent
Construction/Modification
Commencement Date:

Most Recent Operation
Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC007

Process Name:

Company Process Description:

Source Classification Code (SCC): 4-04-003-15

Control Equipment : CNC001

Sep 18 2015, 09:17:14

- Control Equipment Information

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC001

AQD Description: NSCR AFRC

Company Control Equipment ID: NSCR AFRC

Company Control Equipment
Description:

Operating Status: Not Operating

Initial Installation Date:

Manufacturer:

Model:

- Specific Equipment Type information

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify
units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 9999

Inlet Gas Temp: 9999

Outlet Gas Temp: 9999

Air Fuel Ratio Controller: Yes

- Pollutants Controlled

| Pollutant | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|-----------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| NOx - Nitrogen Oxides | 89 | 98 | 100 | 98 |

- Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER001

Control Equipment : CNC002

Sep 18 2015, 09:17:14

- Control Equipment Information

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC002

AQD Description: NSCR AFRC

Company Control Equipment ID: NSCR AFRC

Company Control Equipment
Description: NSCR AFRC

Operating Status: Not Operating

Initial Installation Date:

Manufacturer:

Model:

- Specific Equipment Type information

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify
units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 9999

Inlet Gas Temp: 9999

Outlet Gas Temp: 9999

Air Fuel Ratio Controller: Yes

- Pollutants Controlled

| Pollutant | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|-----------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| NOx - Nitrogen Oxides | 89 | 98 | 100 | 98 |

- Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER002

Control Equipment : FLA001

Sep 18 2015, 09:17:14

- Control Equipment Information

Equipment Type: Flare
Control Equipment ID: FLA001
AQD Description:
Company Control Equipment ID: PGM Flare
Company Control Equipment Description: Paint/Good Med Flare
Operating Status: Operating
Manufacturer: Steffes
Initial Installation Date: 04/24/2015
Model: Dual Tip Flare

- Specific Equipment Type information

Flare Type: Enclosed
Elevated Flare Type: Non-Assisted
Ignition Device: Yes
Flame Presence Sensor: Yes
Inlet Gas Temp: 90
Flame Presence Type: Other
Gas Flow Rate:
Sec. Outlet Gas Temp: 900

- Pollutants Controlled

| Pollutant | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|----------------------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| VOC - Volatile Organic Compounds | 98 | 98 | 98 | 96.04 |

- Associated Control Equipments And Release Points

Control Equipment : FLA002

Sep 18 2015, 09:17:14

- Control Equipment Information

Equipment Type: Flare
Control Equipment ID: FLA002
AQD Description:
Company Control Equipment ID: Flare
Company Control Equipment Description: Paint/Good Med Flare
Operating Status: Operating
Manufacturer: Steffes
Initial Installation Date: 04/24/2015
Model: Dual Tip Flare

- Specific Equipment Type information

Flare Type: Enclosed
Elevated Flare Type: Non-Assisted
Ignition Device: Yes
Flame Presence Sensor: Yes
Inlet Gas Temp: 90
Flame Presence Type: Other
Gas Flow Rate:
Sec. Outlet Gas Temp:

- Pollutants Controlled

| Pollutant | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|----------------------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| VOC - Volatile Organic Compounds | 98 | 98 | 98 | 96.04 |

- Associated Control Equipments And Release Points

Release Point : VER001

Sep 18 2015, 09:17:14

- Release Point Information

Release Point ID: VER001

Release Type: Vertical

AQD Description: ENG001

Company Release Point ID: ENG001

Company Release Point Description: ENG001

Operating Status: Operating

Base Elevation (ft): 5241.0

- Stack Details

Stack Height (ft): 10.0

Stack Diameter (ft): 0.25

Exit Gas Velocity (ft/s): 483.83

Exit Gas Flow Rate (acfm): 1425.0

Exit Gas Temp (F): 325.0

- Release Latitude and Longitude

Latitude: 43.44463

Longitude: -105.91353

- CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

Release Point : VER002

Sep 18 2015, 09:17:14

- Release Point Information

Release Point ID: VER002

Release Type: Vertical

AQD Description: ENG001

Company Release Point ID: ENG001

Company Release Point Description: ENG001

Operating Status: Operating

Base Elevation (ft): 5241.0

- Stack Details

Stack Height (ft): 10.0

Stack Diameter (ft): 0.25

Exit Gas Velocity (ft/s): 483.83

Exit Gas Flow Rate (acfm): 1425.0

Exit Gas Temp (F): 325.0

- Release Latitude and Longitude

Latitude: 43.44463

Longitude: -105.91353

- CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

Release Point : AVL001

Sep 18 2015, 09:17:14

- Release Point Information

Release Point ID: AVL001

Release Type: Fugitive (Area, Volume, Line)

AQD Description:

Company Release Point ID: PGM Fugs

Company Release Point Description: Paint/Good Med Fugitives

Operating Status: Operating

Release Height (ft):

- Release Latitude and Longitude

Latitude: 43.44463

Longitude: -105.91353

- CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

